What is claimed is:

1. A channel type switching method for MBMS point to point (P-t-P) and point to multi point (P-t-M) channel, when a UE having MBMS service moves to a cell in driving radio network controller (DRNC) which have a Iur interface between a serving radio network controller (SRNC), comprising the steps of:

.. DRNC deciding to perform switching channel type between common channel and dedicated channel based on the number of user having MBMS service in the cell;

DRNC notifying SRNC of MBMS channel type and channel parameters.

2. The method as set forth in claim 1, wherein said channel switching is determined by the threshold value of user number.

15

20

25

5

10

3. The method as set forth in claim 1, wherein said channel switching further comprising the steps of:

SRNC requesting DRNC to set up dedicated channel, and informing DRNC to set up the relevant information of the dedicated channel and MBMS service identifier received by the user;

DRNC counting the number of MBMS users;

DRNC deciding to set up dedicated channel or common channel according to the number of users;

DRNC reporting channel type information to be set up to SRNC;

SRNC setting up dedicated channel or obtaining common channel information from DRNC;

WO 2004/017580 PCT/KR2003/001649

- 22 -

SRNC notifying UE to re-configure MBMS channel via RRC message to complete channel switching.

4. The method as set forth in claim 1, wherein said channel switching further comprising the steps of:

SRNC sending message to DRNC to inform MBMS service type and used channel information;

DRNC determining the channel type to be set up and informing SRNC the parameters of MBMS channel set up;

SRNC notifying UE to re-configure MBMS channel via RRC message to complete channel switching.

5. The method as set forth in claim 1, wherein said channel switching further comprising the steps of:

SRNC sending message to inquire MBMS service type from DRNC;

DRNC determining the channel type to be set up and informing SRNC the parameters of MBMS channel set up;

SRNC taking responsibility of completing setting up dedicated channel or obtains common channel information from DRNC;

SRNC notifying UE to re-configure MBMS channel via RRC message to complete channel switching.

20

10

15

6. The method as set forth in one of claim 3, 4 and 5, wherein said message transferred from SRNC to DRNC comprises MBMS service identifier the user is performing, which enables DRNC to count the number of MBMS users.

5

7. The method as set forth in one of claim 3, 4 and 5, wherein, if the UE is the first person requesting for this service in DRNC, DRNC setting up RAB connection with core network.

10

15

8. A channel type switching method for multi media broadcast and multicast service (MBMS) point to point (P-t-P) and point to multi point (P-t-M) channel, in a radio network controller, comprising steps of:

checking the number of MBMS users in a cell when a user leaves from the on-going MBMS service;

determining the MBMS channel type according to the number of user having MBMS and a threshold; and

reporting the changes of MBMS channel type to a serving radio network controller (SRNC).

20

9. The method as set forth in claim 8, further comprising: receiving, the SRNC, MBMS channel type from the DRNC; and transmitting channel reconfiguration request message to the UE in the cell. WO 2004/017580 PCT/KR2003/001649

- 24 -

10. A channel type switching method for multi media broadcast and multicast service (MBMS) point to point (P-t-P) and point to multi point (P-t-M) channel, in a radio network controller, comprising the steps of:

transmitting, SRNC, MBMS channel information inquiry message to a driving radio network controller (DRNC);

transmitting, upon receiving the channel information inquiry message in DRNC, MBMS channel type and channel parameters of MBMS channel to the SRNC; and

notifying, SRNC, UE to re-configure MBMS channel via RRC message to complete channel switching, wherein the channel type is determined based on the number of user having MBMS service in the cell.

10

15

20

25

- 11. The method as set forth in claim 10, wherein said message transferred from SRNC to DRNC comprises MBMS service identifier.
- 12. A data communication channel establishment methods for setting up multimedia broadcast/multicast service (MBMS) with core network (CN) via driving radio network controller (DRNC), when a UE moves to a cell controlled by the DRNC, comprising the steps of:

serving radio network controller (SRNC) sending messages to the DRNC; the DRNC sending MBMS service request message to the CN; the CN requesting to set up data connection with the DRNC; the DRNC sending response message to the CN.

PCT/KR2003/001649

13. The method as set forth in claim 12, wherein said SRNC sending messages to the DRNC comprises a MBMS service identifier.